#### Message

From: Kraft, Andrew [Kraft.Andrew@epa.gov]

**Sent**: 7/19/2016 2:51:20 PM

To: Subramaniam, Ravi [Subramaniam.Ravi@epa.gov]

CC: Glenn, Barbara [Glenn.Barbara@epa.gov]

Subject: RE: addl papers on DPX and other

Attachments: 3120879.pdf

From: Subramaniam, Ravi

Sent: Tuesday, July 19, 2016 9:34 AM

**To:** Kraft, Andrew < Kraft. Andrew@epa.gov> **Subject:** RE: addl papers on DPX and other

Do we have this paper?

--Ravi.

Ravi Subramaniam, PhD / Chief (acting), Toxic Effects Branch-IRIS, NCEA-ORD, EPA. Room PYS-11782/ Ph: (703) 347-8606

From: Kraft, Andrew

Sent: Tuesday, July 19, 2016 8:23 AM

To: Subramaniam, Ravi < Subramaniam.Ravi@epa.gov>

Subject: RE: addl papers on DPX and other

I didn't know if you were aware of Rebecca and Mel's paper as well (in vitro, looks like):

http://mutage.oxfordjournals.org/content/31/3/333.full

From: Subramaniam, Ravi

Sent: Thursday, June 16, 2016 8:40 AM

**To:** Bussard, David < <u>Bussard.David@epa.gov</u>>

Cc: Kraft, Andrew < Kraft. Andrew@epa.gov>; Fritz, Jason < Fritz. Jason@epa.gov>; Glenn, Barbara

<Glenn.Barbara@epa.gov>; Vulimiri, Suryanarayana <Vulimiri.Sury@epa.gov>

Subject: RE: addl papers on DPX and other

Importance: High

David:

Regarding the new paper on DPX from Swenberg's lab: I have not checked but it appears from Jason's response that the paper has been addressed in the hazard/MOA parts of the assessment. There were two issues from that paper that were on my radar. I am stating roughly what these are, and will add some blurbs pertaining to the half life issue in a few days.

# Ex. 5 Deliberative Process (DP)

# Ex. 5 Deliberative Process (DP)

--Ravi.

Ravi Subramaniam, PhD / Chief (acting), Toxic Effects Branch-IRIS, NCEA-ORD, EPA. Room PYS-11782/ Ph: (703) 347-8606

From: Fritz, Jason

Sent: Wednesday, May 25, 2016 2:39 PM

To: Glenn, Barbara < Glenn, Barbara@epa.gov>; Vulimiri, Suryanarayana < Vulimiri.Sury@epa.gov>;

Subramaniam, Ravi < Subramaniam. Ravi@epa.gov >

Cc: Kraft, Andrew < <a href="mailto:Kraft.Andrew@epa.gov">Kraft, Andrew@epa.gov</a> Subject: RE: addl papers on DPX and other

Regarding what you've asked me: didn't we already talk about doing this several months ago, and didn't I already incorporate those elements as necessary into the MOA sections? if

From: Glenn, Barbara

Sent: Wednesday, May 25, 2016 1:27 PM

To: Fritz, Jason < Fritz. Jason@epa.gov>; Vulimiri, Suryanarayana < Vulimiri. Sury@epa.gov>;

Subramaniam, Ravi < Subramaniam. Ravi@epa.gov>

Cc: Kraft, Andrew < <a href="mailto:Kraft.Andrew@epa.gov">Kraft.Andrew@epa.gov</a> > Subject: addl papers on DPX and other

Some additional papers have been published over the last several months that we need to discuss how we will incorporate into the draft document. Specifically these are:

The bottom-up approach to bounding potential low-dose cancer risks from formaldehyde: An update

Thomas B. Starr, James A. Swenberg

Regulatory Toxicology and Pharmacology 77 (2016) 167e174

Measurement of endogenous versus exogenous formaldehyde induced DNA-protein crosslinks in animal tissues by stable isotope labeling and ultrasensitive mass spectrometry

Yongquan Lai, Rui Yu, Hadley J. Hartwell, Benjamin C. Moeller, Wanda M. Bodnar, and James A. Swenberg

Maybe there are others as well.

Ravi, I believe that you have read this paper and this is on your radar to incorporate.

Jason and Sury, it would be great if you read the article on DPX and formed an opinion about if we need to alter any discussions in the main document or appendix and what the message should be. Sury: toxicokinetics, genotoxicity; Jason: cancer MOA

Also, Jason, there also was a paper about role of endogenous formaldehyde in causing leukemia

#### Ex. 5 Deliberative Process (DP)

We can have a brief discussion to decide at some point.

Thank you, Barbara

From: Subramaniam, Ravi

Sent: Friday, March 18, 2016 6:42 PM

To: Bussard, David <Bussard.David@epa.gov>; Fritz, Jason <Fritz.Jason@epa.gov>

Cc: White, Paul < White. Paul@epa.gov>; Cogliano, Vincent < cogliano.vincent@epa.gov>; Flowers, Lynn

<<u>Flowers.Lynn@epa.gov</u>>; Kraft, Andrew <<u>Kraft.Andrew@epa.gov</u>>; Glenn, Barbara

<<u>Glenn.Barbara@epa.gov</u>>; Vulimiri, Suryanarayana <<u>Vulimiri.Sury@epa.gov</u>>

Subject: RE: Swenberg paper coming out today

David:

### Ex. 5 Deliberative Process (DP)

## Ex. 5 Deliberative Process (DP)

--Ravi.

Ravi Subramaniam, PhD / Chief (acting), Toxic Effects Branch-IRIS, NCEA-ORD, EPA. Room PYS-11782/ Ph: (703) 347-8606

From: Bussard, David

Sent: Thursday, March 17, 2016 12:10 PM

To: Subramaniam, Ravi <Subramaniam.Ravi@epa.gov>; Fritz, Jason <Fritz.Jason@epa.gov>

Subject: FW: Swenberg paper coming out today

#### Ex. 5 Deliberative Process (DP)

### Ex. 5 Deliberative Process (DP)

David

From: Bussard, David

Sent: Thursday, March 17, 2016 11:41 AM

To: Flowers, Lynn < Flowers. Lynn@epa.gov >; Subramaniam, Ravi

<<u>Subramaniam.Ravi@epa.gov</u>>; Kraft, Andrew <<u>Kraft.Andrew@epa.gov</u>>; Glenn, Barbara

<<u>Glenn.Barbara@epa.gov</u>>; Jason Fritz (Fritz.Jason@epa.gov) <<u>Fritz.Jason@epa.gov</u>>; Caldwell,

Jane <Caldwell.Jane@epa.gov>

Subject: RE: Swenberg paper coming out today

Thanks Lynn,

I just checked the journal page. I assume it is the attached.

David